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I. NOTIFICATION REQUIREMENTS

This permit does not authorize the discharge of pollutants to waters of the United States until the following three requirements, which are set out in more detail in subparagraphs A. through C. below, are met. First, the permit applicant must send in a request to be covered by the permit and authorization to discharge. Second, the applicant must receive from EPA an authorization to discharge. Third, once authorized, the permittee must notify EPA of its intent to discharge at least seven days in advance of the discharge. Failure to comply with any of these requirements will vitiate any prior authorization to discharge under this general permit.

A. Requests for Coverage and Authorization to Discharge Under the General Permit.

Persons requesting coverage under this general permit shall provide to EPA written request to be covered by this permit at least 60 days prior to initiation of discharges. All requests for coverage and authorization to discharge under the general permit shall be provided to the Alaska Department of Environmental Conservation Joint Pipeline Regional Office in Anchorage. The request shall include the following information:

1. Name and address of the permittee.
2. Lease and block numbers of operations and discharges.
3. Any discharge or operating conditions which will require special monitoring (Part II.A.4.).

B. Authorization to Discharge. The permittee's discharges are not authorized until the permittee receives from EPA written notification that EPA has assigned a permit number under this general permit to operations at the discharge site. A permit number cannot be assigned until the following information is received. This information shall be provided to EPA in the request for coverage, if possible, but in no case less than 30 days prior to commencement of discharges.

1. Name and location of discharge site, including lease block number and approximate coordinates.
2. Range of water depths (below mean lower low water) in lease block, and depth of discharge.
3. Initial date and expected duration of operations.

C. Notice of Intent to Commencement of Discharges. The permittee shall notify EPA,

Region 10, no later than 7-days prior to initiation of discharges from the facility and from each well. The notification shall include the exact coordinates (latitude and longitude) and water depth of the discharge site, and may be oral or in writing. The Certification of Planning for Drilling Muds (see Part II.A.1.f.) and the Best Management Practices Plan Certification (see Part II.F.1.) shall also be submitted no later than the notification of commencement of discharges. If notification is given orally, written confirmation must follow within 7 days.

- D. Sites Requiring Environmental Surveys.** All operators that locate within the areas covered by this general permit shall submit to EPA copies of any exploration plans, biological surveys, and/or environmental reports required by the Regional Supervisor, Field Operations of the Minerals Management Service, State of Alaska, for the identification and/or protection of biological populations or habitats. Permittees shall notify Region 10 in writing when no exploration plan or environmental report will be sent.
- E. Termination of Discharges.** The permittee shall notify EPA within 30 days following cessation of discharges from each well and from the discharge site. The notification may be provided in a DMR or under separate cover.
- F. Submission of Requests for Coverage and Authorization, Notice of Intent to Commence Discharge, and Other Reports.** Reports and notifications required herein shall be submitted to the following addresses.

All requests for coverage and authorization and notices of intent:

Director, Water Division
U.S. Environmental Protection Agency, Reg. 10
Attn: Ocean Programs Section, WD-137
1200 Sixth Avenue
Seattle, Washington 98101
(206) 553-1583

Alaska Department of Environmental Conservation
Pipeline Corridor Regional Office
Attn: Water Quality & Wastewater Programs
411 West 4th Ave., Suite 2C
Anchorage, Alaska 99501

All monitoring reports and notifications of non-compliance:
Director, Water Division
U.S. Environmental Protection Agency, Reg. 10

Attn: Water Compliance Section, WD-135
1200 Sixth Avenue
Seattle, Washington 98101
(206) 553-6513

G. Changes from Authorization Under General Permit to Authorization Under an Individual Permit.

1. The Director may require any permittee discharging under the authority of this permit to apply for and obtain an individual NPDES permit when any one of the following conditions exist:
 - a. The discharge(s) is (are) a significant contributor of pollution.
 - b. The permittee is not in compliance with the conditions of this general permit.
 - c. A change has occurred in the availability of the demonstrated technology or practices for the control or abatement of pollutants applicable to the point source.
 - d. A Water Quality Management Plan containing requirements applicable to such point source is approved.
 - e. The point sources covered by this permit no longer:
 - (1) involve the same or substantially similar types of operations,
 - (2) discharge the same types of wastes,
 - (3) require the same effluent limitations or operating conditions, or
 - (4) require the same or similar monitoring.
 - f. In the opinion of the Director, the discharges are more appropriately controlled under an individual permit than under a general NPDES permit.
2. The Director may require any permittee authorized by this permit to apply for an individual NPDES permit only if the permittee has been notified in writing that an individual permit application is required.
3. Any permittee authorized by this permit may request to be excluded from the coverage of this general permit by applying for an individual permit. The owner or operator shall submit an application together with the reasons supporting the

request to the Director no later than 90 days after the effective date of the permit.

4. When an individual NPDES permit is issued to a permittee otherwise subject to this general permit, the authorization to discharge under this general permit is automatically terminated on the effective date of the individual permit.

II. SPECIFIC LIMITATIONS AND MONITORING REQUIREMENTS

During the effective period of this permit, operators authorized to discharge under the general permit are authorized to discharge the enumerated pollutants subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility or any pollutants that are not ordinarily present in such waste streams. This permit does not authorize the discharge of any pollutants not specifically set out in Part II.A.1. of this permit.

The operators shall limit discharges as specified in the permit below. All figures represent maximum effluent limits unless otherwise indicated. The permittee shall comply with the following effluent limits at all times unless provided for by this permit (e.g., unanticipated bypass) regardless of the frequency of monitoring or reporting required by other provisions of this permit.

A. Drilling Mud and Drilling Cuttings (Discharge 001).

- Effluent Limitations and General Requirements. The permittee may discharge drilling muds and drilling cuttings subject to the effluent limitations and related requirements set forth herein. Permittee shall limit and monitor the following parameters in accordance with Parts II.A.2.-4., II.E., III., and the requirements set out herein.

EFFLUENT LIMITS and MONITORING REQUIREMENTS

Effluent Characteristic	Discharge Limitation	Measurement Frequency	Sample Type/Method	Reported Value(s)
Toxicity	30,000 ppm SPP minimum	See Part II.A.1.g.k	Drilling Fluids Toxicity Test	96 hr LC50
Flow rate/Water depth ^{1/}				
0-5 meters	No discharge	Hourly during discharge	Estimate	Maximum hourly rate
>5-20 meters	500 bbl/hr			
>20-40 meters	750 bbl/hr			
>40 meters	1000 bbl/hr			
Oil-based fluids	No discharge	Daily & before bulk discharges	Grab/Static Sheen Test ^{2/}	Presence or absence
Diesel oil ^{3/}	No discharge	Daily & before bulk discharges	Grab/GC	Presence or absence
Free oil	No discharge discharges	Daily & before Sheen Test ^{2/}	Grab/Static sheen observed	Number of daysbulk
Hg and Cd in barite	1 mg Hg/kg barite 3 mg Cd/kg barite	Once per well	AAS	Concentrations (mg/kg, dry wt.)
Total volume	^{4/}	Daily	Estimate	Monthly total
Mud plan	NA	Prior Certification	See Parts II.A.d.,e.,f.	NA
Chemical inventory	NA	Once/mud system	See Part II.A.i.	NA
Chemical analysis	NA	Once/mud system	See Part II.A.j.	NA

^{1/} Maximum flow rate of total muds and cuttings into waters of given depths and under open water, broken ice, and stable ice conditions. A 9:1 predilution is required in open water, under-ice, and unstable or broken ice conditions.

^{2/} For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature that approximates surface water temperatures after breakup shall be used.

^{3/} The measurement for diesel oil is daily if muds and cuttings fail static sheen test, before bulk discharges, and end-of-well.

^{4/} Exploratory drilling discharges are limited to discharges from no more than five wells at a single drilling site. If a step-out or sidetracked well is drilled from a previously drilled well hole, the step-out well is counted as a new well. Requests to discharge the wastes from more than five wells per site will be considered by the Director on a case-by-case basis.

- a. No discharge of oil-based muds. Permittee shall not discharge oil-based drilling muds (containing oil as the continuous phase with water as the dispersed phase).
- b. No discharge of diesel oil. Permittee shall not discharge water-based drilling muds which have contained diesel oil or cuttings associated with any muds which have contained diesel oil. Compliance with the limitation on diesel oil shall be demonstrated by gas chromatography (GC) analysis of drilling mud collected from the mud used at the greatest well depth ("end-of-well" sample) and of any muds or cuttings which fail the daily Static Sheen Test (Part II.A.1.c. below). In all cases, the determination of the presence or absence of diesel oil shall be based on a comparison of the GC spectra of the sample and of diesel oil in storage at the facility. The method for GC analysis shall be that described in "Analysis of Diesel Oil in Drilling Fluids and Drill Cuttings" (CENTEC, 1985) available from EPA, Region 10. Gas chromatography/mass spectrometry (GC/MS) may be used if an instance should arise where the operator and EPA determine that greater resolution of the drilling mud "fingerprint" is needed for a particular drilling mud sample.

The end-of-well analysis for diesel oil shall be done in conjunction with the end-of-well analyses required in Part II.A.1.j. The results and raw data, including the spectra, from the GC analysis shall be provided to the Director by written report (1) within 30 days of a positive result with the Static Sheen Test when a discharge has occurred, or (2) for the end-of-well analysis, within 45 days of well completion.

- c. No discharge of free oil. There shall be no discharge of free oil as a result of the discharge of drill cuttings and/or drilling muds. The

permittee shall perform the Static Sheen Test on separate samples of drilling muds and cuttings on each day of discharge and prior to bulk discharges. The test shall be conducted in accordance with "Approved Methodology": Laboratory Sheen Tests for the Offshore Subcategory, Oil and Gas Extraction Industry " which is Appendix 1 of Subpart A of 40 CFR Part 435. For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature that approximates surface water temperatures at breakup shall be used. The discharge of drilling muds or cuttings which fail the Static Sheen Test is prohibited.

Whenever muds or cuttings fail the Static Sheen Test and a discharge has occurred in the past 24 hours, the permittee is required to analyze an undiluted sample of the material which failed the test to determine the presence or absence of diesel oil. The determination and reporting of results shall be performed according to Part II.A.1.b. above.

- d. Planned discharge of drilling muds and additives - Mud Plan. The permittee shall develop and have on-site at all times a written procedural plan for the formulation and control of drilling mud/additive systems (hereafter "the mud plan"). The mud plan must specify the mud/additive systems to be used. The plan shall be implemented during drilling operations.

The mud plan shall be available to the Agency upon request. Prior to commencement of discharges from a given operation, the permittee shall provide EPA and ADEC with written certification that a mud plan does exist and is available to the agencies (See Parts I.C. and II.A.1.f. of the permit).

At a minimum, the mud plan shall provide the following information:

- (1) Types of muds proposed for discharge, the well name, well number, NPDES permit number and mud types as basic plan identification for each well drilled.
- (2) Specific for use at each well and mud type, a list including commercial product names, descriptions of the products, and the maximum proposed discharge concentrations for each product. Concentrations shall be commonly stated in terms of "lb/bbl," "gal/bbl;" although "% (wt)" or "% v/v" (% volume oil/volume mud) may be appropriate in some instances. Each mud/additive system shall be clearly labelled with respect to mud type (e.g., KCl/polymer mud, freshwater lignosulfonate mud). Components of the basic mud shall be listed separately from specialty or contingency additives which may be used.
- (3) A record of the operator's determination of how discharge is expected to comply with the 30,000 ppm SPP toxicity limitation. Operator's determination must be based upon, but not necessarily limited to, the following criteria:
 - (a) Estimate of worst-case cumulative discharge toxicity based on additive toxicity estimations or commercially calculated discharge toxicity estimations.
 - (b) Estimations of discharge toxicity based on the use of mineral oil pills (and subsequent discharge of residual mineral oil concentrations (see Part II.A.1.g. below) must be estimated separately from the proposed mud/additive system.
 - (c) Where possible, overall toxicity shall be minimized.

- (4) A clearly stated procedure for determining whether or not an additive not originally planned for or included in toxicity estimations above may be used and discharged.
 - (5) An outline of the mud planning process which shall be consistent with other permit requirements. Names and titles of personnel responsible for the mud planning process shall be included.
- e. Drilling mud and additive formulations. Only those drilling muds, specialty additives, and mineral oil pills that meet the criteria of this permit and are contained in the operator's mud plan (see Part II.A.1.d. above) shall be discharged. In no case shall toxicity of the discharged mud exceed the toxicity limit of 30,000 ppm SPP (see Part II.A.1. above).
- f. Certification of planning for drilling mud discharge. For each well the operator shall submit written certification which states that a mud plan is complete, on-site, and available upon request. In addition, each certification shall identify the well it pertains to by well name, well number, and the NPDES permit number. The certification shall be submitted no later than the written notice of intent to commence discharge (see Part I.C.).
- If the operator elects to use a particular drilling mud/additive system on subsequent wells, the original mud plan may be re-used. Information identifying the plan (see Part II.A.1.d(1), above), however, must reflect use of the plan for the current well.
- g. Restrictions on the Use of a Mineral Oil Pill in Drilling Fluid. The discharge of residual amounts of mineral oil pills (mineral oil plus additives) is authorized by this permit provided that the

mineral oil pill and at least a 50 bbl buffer of drilling fluid on either side of the pill are removed from the circulating drilling fluid system and not discharged to the waters of the United States. In the event that more than one pill is applied to a single well, the previous pill and buffer shall be removed prior to application of a subsequent pill. Residual mineral oil concentration in the discharged mud shall not exceed 2% v/v (API Retort Test) (see Part II.A.1.g.[9] below). The discharged mud must comply with all permit conditions, including no discharge of free oil.

Should drilling mud containing residual mineral oil pill (after pill and buffer removal) be discharged, the following information shall be reported within 60 days of discharge:

- (1) Dates of pill application, recovery, and discharge;
- (2) Results of the Drilling Fluids Toxicity Test on samples of:
 - (a) the mud before each pill is added and
 - (b) the mud after removal of each pill and buffer (taken when residual mineral oil pill concentration is expected to be greatest)
- (3) Name of spotting compound and mineral oil products used;
- (4) Volumes of spotting compound, mineral oil, water, and barite in the pill;
- (5) Total volume of mud circulating prior to pill application, volume of pill formulated, and volume of pill circulated;

- (6) Volume of pill recovered, volume of mud buffer recovered, and volume of mud circulating after pill and buffer recovery;
- (7) Percent recovery of the pill (include calculations);
- (8) Estimated concentrations of residual spotting compound and mineral oil in the sample of mud discharged, as determined from amounts added and total mud volume circulating prior to pill application;
- (9) Measured oil content of the mud samples, as determined by the API retort method; and
- (10) An itemization of other drilling fluid specialty additives contained in the discharged mud.

h. Mercury and cadmium content of barite. The permittee shall not discharge a drilling mud to which barite was added if such barite contained mercury in excess of 1 mg/kg or cadmium in excess of 3 mg/kg (dry weight basis). The permittee shall analyze a representative sample of stock barite once prior to drilling each well and submit the results for total mercury and total cadmium in the Discharge Monitoring Report upon well completion. If more than one well is drilled at a site, new analyses are not required for subsequent wells if no new supplies of barite have been received since the previous analysis. In this case, the DMR should state that no new barite was received since the last reported analysis. Operators may provide certification, as documented by the supplier(s), that the barite will meet the above limits. The concentration of the mercury and cadmium in the barite shall be reported on the DMR as documented by the supplier. Analyses shall be conducted by atomic absorption spectrophotometry and results expressed as mg/kg

(dry weight) of barite.

- i. Chemical inventory. For each mud system discharged, the permittee shall maintain a precise chemical inventory of all constituents added downhole, including all drilling mud additives used to meet specific drilling requirements. The permittee shall report the following for each mud system:

- (1) base mud type (as identified in mud plan);
- (2) name and total amount of each constituent in discharged mud;
- (3) the total volumes of mud created and added downhole; and
- (4) maximum concentration of each constituent in the discharged mud.

In addition, for each mud system discharged, the permittee shall report the following:

- (5) the total volumes of mud discharged; and
- (6) the estimated amount of each constituent discharged.

- j. Chemical analysis. The permittee shall analyze each discharged mud system containing a mineral oil lubricity and/or spotting agent. Samples shall be collected when the mineral oil additive concentration is at its maximum value. If no mineral oil is used, the analysis shall be done on a drilling mud sample collected from the mud system used at the greatest well depth. All samples shall be collected prior to any predilution. Each drilling mud sample shall be of sufficient size to allow for both the chemical testing described here and the toxicity testing described below in Part II.A.1.k.

The chemical analysis shall include the following metals: barium, cadmium, chromium, copper, mercury, zinc, and lead. The total concentration and total recoverable concentration shall be conducted on split samples and reported for each metal and shall be obtained by the methods given in 40 CFR § 136. The results shall be reported in "mg/kg of whole mud (dry weight)," and the moisture content (percent by weight) of the original drilling mud sample shall be reported.

In addition, permittees shall analyze mud samples for oil content (percent by weight and by volume). The analytical method shall be the retort distillation method for oil (American Petroleum Institute, Recommended Practice 13-1, 1990).

Results of chemical analyses shall be submitted within 45 days following well completion. Results shall be submitted with the end-of-well chemical inventory, see Part II.A.1.i., and shall identify the corresponding mud system from the end-of-well inventory.

- k. Toxicity Test. If no mineral oil is used, the toxicity test shall be conducted monthly to determine compliance with the toxicity limit.

At end-of-well, a sample shall be collected for toxicity testing. This sample can also serve as the monthly monitoring sample. The sample shall be a representative subsample of that collected for chemical analysis (see Part I.A.1.j.).

The permittee shall complete a minimum of two toxicity tests on each mud system where a mineral oil lubricity or spotting agent is used. One sample shall be collected before applying the pill and one after removing the pill (see Part II.A.1.g.). The "after pill" sample test results can be used as the monthly monitoring sample. If the well is completed within 96 hours of

collection of the "after pill" drilling mud sample, then these test results can also serve as the end-of-well test.

The testing and reporting of results shall be in accordance with Appendix 2 to Subpart A of 40 CFR Part 435. Results of toxicity tests shall be reported on monthly DMRs. Full copies of the toxicity test reports shall be attached to the DMRs and be accompanied by an inventory of all base mud components and specialty additives present in the sampled mud (including concentrations of each). Results are due within 45 days following well completion.

2. Depth-Related Requirements.

The total drilling muds and drill cuttings discharge rate shall not exceed the following rates where depth is measured as meters from mean lower low water (MLLW):
(a) 1000 bbl/hr in water depths exceeding 40 meters,
(b) 750 bbl/hr in water depths greater than 20 meters but not exceeding 40 meters, (c) 500 bbl/hr in water depths greater than 5 meters but not exceeding 20 meters, and (d) discharge of muds and cuttings are prohibited between the shore (mainland and barrier islands) and the 5 meter isobath.

3. Area and Seasonal Restrictions.

- a. Discharge is not authorized within 1000 meters of the Steffansson Sound Boulder Patch (near the mouth of the Sagavanirktok River) or between individual units of the Patch where the separation between units is greater than 2000 meters but less than 5000 meters. The Boulder Patch is defined as an area which has more than 10 percent of a one-hundred-square-meter area covered by boulders to which kelp is attached.
- b. Discharge is not authorized within Omalik Lagoon, Kasegaluk Lagoon or within 3 miles of the

following passes of the Kasegaluk Lagoon:
Kukpowruk Pass, Akunik Pass, Utukok Pass, Icy Cape
Pass, Alokiakatat Pass, Naokok Pass, and
Pingaorarak Pass.

- c. Discharge is prohibited within 1000 meters of river mouths or deltas during unstable or broken ice or open water conditions.
- d. During open-water conditions, discharge in the area from the 5 to 20 meters isobaths as measured from MLLW shall be released no deeper than 1 meter below the surface of the receiving water.
- e. During unstable or broken ice conditions, the following conditions apply for discharges shoreward of the 20 meters isobath as measured from MLLW:
 - (1) Discharge shall be prediluted to a 9:1 ratio of seawater to drilling muds and cuttings.
 - (2) Environmental monitoring is required as specified in Part II.A.4. below.
- f. During stable ice conditions, unless authorized otherwise by the Director, the following conditions apply:
 - (1) Discharges shall be to above-ice locations and shall avoid to the maximum extent possible areas of sea ice cracking or major stress fracturing.
 - (2) Predilution and flow rate restrictions do not apply.

4. Environmental Monitoring Requirements.

- a. Purpose/Areas to be Monitored.. Monitoring is required in the following areas which have been identified as requiring further information on the

fate and, in some cases, the effects of discharged drilling muds. If the location authorized for discharge of drilling muds and drill cuttings is within 4000 meters of the following areas, then environmental monitoring is required:

- (1) below-ice to water depths shallower than 20 meters as measured from MLLW,
- (2) the Steffansson Sound Boulder Patch (see Part II.A.3.a. of this permit for further definition),
- (3) the protected areas of Kasegaluk Lagoon and the seven identified passes (see Part II.A.3.b. for further definition),
- (4) Omalik Lagoon, or
- (5) river mouths or deltas during unstable or broken ice or open water conditions.

b. Objectives. The objectives of the monitoring shall be to:

- (1) monitor for discharge-related impacts,
- (2) determine statistically significant changes in sediment pollutant concentrations and sediment toxicity with time and distance from the discharge
- (3) monitor for discharge related impacts to the benthic community,
- (4) assess whether any impacts warrant an adjustment of the monitoring program, and
- (5) provide information for permit reissuance.

The monitoring shall include, but not be limited to, relevant hydrographic, sediment hydrocarbon,

and heavy metal data from surveys conducted before and during drilling mud disposal operations and up to at least one year after drilling operations cease.

- c. Detailed Monitoring Proposal. The Permittee shall submit a plan of study for the environmental monitoring program to EPA and ADEC for review with or prior to submission of the written request for authorization to discharge (Part I.B.). EPA and ADEC may require changes in the monitoring program's design. Copies of the study plan shall be sent concurrently to the North Slope Borough. The plan shall address:

- (1) the monitoring objectives,
- (2) appropriate null and alternate test hypotheses,
- (3) a statistically valid sampling design,
- (4) all monitoring procedures and methods,
- (5) a quality assurance/quality control program,
- (6) a detailed discussion of how data will be used to meet, test and evaluate the monitoring objectives, and
- (7) a summary of the results of previous environmental monitoring as they apply to the proposed program plan.

- d. Reporting and Data Submission Requirements. The Permittee shall analyze the data and submit a draft report by within 180 days following the completion of sample collection. Copies of the draft report shall be sent concurrently to ADEC and the North Slope Borough. The report shall address the environmental monitoring objectives by using appropriate descriptive and analytical

methods to test for and to describe any impacts of the effluent on sediment pollutant concentrations, sediment quality, water quality and/or the benthic community. The report shall include all relevant quality assurance/quality control (QA/QC) information, including but not limited to instrumentation, laboratory procedures, detection limits/precision requirements of the applied analyses, and sample collection methodology.

EPA and ADEC will review the draft report in accordance with the environmental monitoring objectives and evaluate it for compliance with the requirements of the permit. If revisions to the report are required, the Permittee shall complete them and submit the final report to EPA and ADEC within two months of the Director's request. Copies of the final report shall be sent concurrently to the North Slope Borough. The Permittee will be required to correct, repeat and/or expand environmental monitoring programs which have not fulfilled the requirements of the permit.

- e. Modification of Monitoring Program. The monitoring program may be modified if EPA and ADEC, in consultation with the North Slope Borough, determine that it is appropriate. The modified program may include changes in (1) sampling stations, (2) sampling times, and/or (3) parameters.

**B. Deck Drainage, Sanitary Wastes, and Domestic Wastes
(Discharges 002-004).**

Permittees shall limit and monitor discharges from deck drainage, sanitary wastes, and domestic wastes in accordance with Parts II.E., III. and the following requirements.

EFFLUENT LIMITS and MONITORING REQUIREMENTS

Effluent Characteristic	Discharge Limitation	Measurement Frequency	Sample Type/Method	Reported Value(s)
All Discharges (002-004)				
Flow rate	NA	Monthly	Estimate	Monthly average
Deck Drainage (002) ^{1/}				
Free oil	No discharge	Daily, during discharge	Visual/sheen on receiving water ^{2/}	Number of days sheen observed
Sanitary Wastes (003) ^{3/}				
Solids	No floating solids	Daily	Observation ^{4/}	Number of days solids observed
Residual chlorine ^{5/}	As close as possible to, but no less than, 1.0 mg/l	Monthly	Grab ^{6/} (mg/l)	Concentration
BOD 30 day average 24-hr maximum	30 mg/l 60 mg/l	Weekly ^{8/}	Grab	Monthly average Daily maximum
TSS 30 day average 24-hr maximum	30 mg/l 60 mg/l	Weekly ^{9/}	Grab Monthly average ^{10/} Daily maximum ^{10/}	
Domestic Wastes (004)				
Floating solids	No discharge	Daily	Observation ^{4/}	Number of days solids observed
Foam	No discharge	Daily	Observation ^{4/}	Number of days foam observed
All other domestic waste (garbage)	No discharge ^{7/}	Daily	Observation ^{9/}	Number of days solids observed

^{1/} Area drains for either washdown water or rainfall that may be contaminated with oil and grease shall be separated from those area drains that would not be contaminated. Any deck drainage which is commingled with other wastes prior to discharge shall

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be subject at the point of discharge to the most stringent of the limitations on the individual effluents.

- ^{2/} If discharge occurs during broken, unstable, or stable ice conditions, the sample type/method shall be "Grab/Static Sheen Test" as described in Appendix 1 to Subpart A of 40 CFR Part 435. For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature that approximates surface water temperatures after breakup shall be used.
- ^{3/} Any facility using a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed to be in compliance with the limitations for this outfall until such time as the device is replaced or is found not to comply with such standards and regulations. The MSD shall be tested yearly for proper operation and test results maintained at the facility. In cases where sanitary and domestic wastes are mixed prior to discharge, and sampling of the sanitary waste component stream is infeasible, the discharge may be sampled after mixing. In such cases, the discharge limitations for sanitary wastes shall apply to the mixed waste stream.
- ^{4/} Monitoring by visual observation of the surface of the receiving water in the vicinity of the outfall(s), shall be done during daylight at a time of maximum estimated discharge.
- ^{5/} This limitation applies only to M10 facilities. Under ice disposal of residual chlorine is not authorized unless residual chlorine is reduced to a level to ensure compliance with the State of Alaska's Water Quality criteria of 10 ug/l residual chlorine.
- ^{6/} Residual chlorine may be monitored according to test procedures approved under 40 CFR § 136 or using a Hach Test Kit capable of measuring free chlorine in the range 0-3.5 mg/l with a sensitivity of 0.1 mg/l or better.
- ^{7/} Discharge of food waste is prohibited within 12 nautical miles from nearest land. Comminuted food waste able to pass through a 25 mm mesh screen (approximately 1 inch) may be discharged more than 12 nautical miles from nearest land. Discharge of putrescible wastes is prohibited within and beyond 12 nautical miles of nearest land.
- ^{8/} An observation shall be made during daylight by visual observation of the surface in the vicinity of domestic waste outfalls following either the morning or midday meal at a time of maximum estimated discharge.^{9/}
- ^{9/} Based on weekly sampling and depending on the length of the calendar month, a total of 3-4 samples will be analyzed per month. The reported 30 day average value shall be the average of all weekly samples taken during the month. The highest value of all weekly samples shall be reported.
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C. Miscellaneous Discharges (Discharges 005-013).

Permittee shall limit and monitor discharges from desalination unit wastes (005), blowout preventer fluid (006), boiler blowdown (007), fire control system test water (008), non-contact cooling waster (009), uncontaminated ballast water (010), bilge water (011), excess cement slurry (012), and mud, cuttings, and cement at the seafloor (013) in accordance with Parts II.E., III., and the following requirements.

<u>EFFLUENT LIMITS and MONITORING REQUIREMENTS</u>				
Effluent Characteristic	Discharge Limitation	Measurement Frequency	Sample Type/Method	Reported Value(s)
<hr/>				
All Discharges (005-013)				
Flow rate (MGD)	NA	Monthly	Estimate	Monthly average
Free oil	No discharge	Once/discharge for intermittent or once/day for continuous discharges	Visual/sheen on receiving	No. of days sheen observed
<hr/>				

1. Bilge water (011) shall be processed through an oil-water separator prior to discharge. If discharge of bilge water occurs during broken, unstable, or stable ice conditions, the sample type/method used to determine compliance with the no free oil limitation shall be "Grab/Static Sheen Test." For discharges above stable ice, below ice, to unstable, or to broken ice, a water temperature that approximates surface water temperatures after breakup shall be used.
2. The permittee shall maintain an inventory of the quantities and rates of chemicals (other than water or seawater) added to cooling water (009) and desalination (005) systems. The inventory shall be submitted with the monthly Discharge Monitoring Report.

D. Test Fluids (Discharge 014).

Permittee shall limit and monitor test fluids in accordance with Parts II.E., III. and the following requirements.

<u>EFFLUENT LIMITS and MONITORING REQUIREMENTS</u>				
Effluent Characteristic	Discharge Limitation	Measurement Frequency	Sample Type/Method	Reported Value(s)
Volume (bbl)	NA	Once/discharge	Estimate	Total vol./ test ^{1/}
Free oil	No discharge	Once/discharge	Grab/Static Sheen Test ^{2/}	Number of times sheen observed
Oil and grease	42 mg/l daily max., 29 mg/l monthly avg.	Once/discharge	Grab	Daily max. and monthly avg.
Ph	6.5-8.5 ^{3/}	Once/discharge	Grab	Ph
Oil-based fluids	No discharge	Once/discharge	Grab/GC	Presence or absence

^{1/} Volume will be reported as the number of barrels of fluids sent downhole during testing and the number of barrels discharged. The chemical composition of the fluids sent downhole will also be reported.

^{2/} For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature that approximates surface water temperatures after breakup shall be used. The static sheen test is presumed to cover the no visible sheen standard in the State of Alaska Water Quality Standards.

^{3/} Any spent acidic test fluids shall be neutralized before discharge such that the Ph at the point of discharge shall not be less than 6.5 or greater than 8.5.

E. General Discharge Limitations for All Waste Streams (001 through 014).

1. Floating Solids, Visible Foam, or Oily Wastes. There shall be no discharge of floating solids or visible foam in other than trace amounts, nor of oily wastes which produce a sheen on the surface of the receiving water.
2. Surfactants, Dispersants, and Detergents. The discharge of surfactants, dispersants, and detergents shall be minimized except as necessary to comply with the safety requirements of the Occupational Health and Safety Administration and the Minerals Management Service. The discharge of dispersants to marine waters in response to oil or other hazardous spills are not authorized this permit. See also Part III.G.
3. Applicable Marine Water Quality Criteria. There shall be no discharge of any constituent in concentrations which will result in an exceedence of applicable marine water quality criteria at the edge of a permitted mixing zone. Initial mixing in federal waters is defined at 40 CFR §227.29.
4. Rubbish, Trash, and Other Refuse. The discharge of any solid material not authorized in the above permit is prohibited. Under U.S. Coast Guard regulations, discharges of garbage, including plastics, from fixed and floating platforms engaged in exploration of seabed mineral resources are prohibited with one exception - victual waste. Victual waste may be discharged beyond 12 nautical miles from nearest land if it has passed through a comminuter or grinder and can pass through a screen with openings no greater than 25 millimeters (approximately one inch). Discharge of putrescible wastes is prohibited within and beyond 12 nautical miles of nearest land.
5. Other Toxic and Non-conventional Compounds. There shall be no discharge of diesel oil, halogenated phenol

compounds, trisodium nitrilotriacetic acid, sodium chromate or sodium dichromate.

F. Best Management Practices Plan Requirement.

1. Implementation. The permittee shall develop and implement a Best Management Practices (BMP) Plan which achieves the objectives and the specific requirements listed below. The Plan shall be implemented as soon as possible but no later than 7 days prior to initiation of discharges from the facility and from each well.

The permittee shall certify that its BMP Plan is complete, on-site, and available upon request to EPA and ADEC. This certification shall identify the well it pertains to by well name, well number, and the NPDES permit number and be signed by an authorized representative of the permittee. The certification shall be submitted no later than the written notice of intent to commence discharge (see Part I.C.) and the Certification of Planning for Drilling Mud (see Part II.A.1.f.).

2. Purpose. Through implementation of the BMP Plan the permittee shall prevent or minimize the generation and the potential for the release of pollutants from the facility to the waters of the United States through normal operations and ancillary activities.
3. Objectives. The permittee shall develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.
 - a. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharged at the facility shall be minimized by the permittee to the extent feasible by managing each influent waste stream in the most appropriate manner.
 - b. Under the BMP Plan, and any Standard Operating Procedures (SOPs) included in the Plan, the

permittee shall ensure proper operation and maintenance of the treatment facility.

c. The permittee shall establish specific objectives for the control of pollutants by conducting the following evaluations.

(1) Each facility component or system shall be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to waters of the United States due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc. The examination shall include all normal operations and ancillary activities including material storage areas, site runoff, in-plant transfer, process and material handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances to result in significant amounts of pollutants reaching surface waters, the program should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

4. Requirements. The BMP Plan shall be consistent with the objectives in Part 3 above and the general guidance contained in the publication entitled "Guidance Document for Developing Best Management Practices (BMP)" (EPA Document Number EPA 833-B-93-004, U.S. EPA, 1993) or any subsequent revisions to the guidance document. The BMP Plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings or maps, and shall be developed in accordance with good engineering practices. The BMP Plan shall be organized and written with the following structure:
 - (1) Name and location of the facility or operation (including identification by latitude/longitude).
 - (2) Statement of BMP policy.
 - (3) Structure, functions, and procedures of the Best Management Practices Committee.
 - (4) Specific management practices and standard operating procedures to achieve the above objectives, including, but not limited to, the following:
 - (a) modification of equipment, facilities, technology, processes, and procedures,
 - (b) reformulation or redesign of products,
 - (c) substitution of materials, and
 - (d) improvement in management, inventory control, materials handling or general operational phases of the facility.
 - (5) Risk identification and assessment.
 - (6) Reporting of BMP incidents.
 - (7) Materials compatibility.
 - (8) Good housekeeping.
 - (9) Preventative maintenance.

- (10) Inspections and records.
- (11) Security.
- (12) Employee training.
- b. Include the following provisions concerning BMP Plan review:
 - (1) Be reviewed by plant engineering staff and the plant manager.
 - (2) Be reviewed and endorsed by the permittee's BMP Committee.
 - (3) Include a statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this permit. The statement shall be certified by the dated signatures of each BMP Committee member.
- c. Establish specific best management practices to meet the objectives identified in Part 3 this section, addressing each component or system capable of generating or causing a release of significant amounts of pollutants, and identifying specific preventative or remedial measures to be implemented.
- d. Establish specific best management practices or other measures which ensure that the following specific requirements are met:
 - (1) Ensure proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource Conservation and Recovery Act (RCRA) and the Alaska Solid Waste Management Regulations (18 AAC 60). Management practices required under RCRA regulations shall be referenced in the BMP Plan.

- (2) Reflect requirements within Oil Spill Contingency Plans required by the Minerals Management Service (see 30 CFR 254). Permittees in state waters must also reflect the requirements within Oil Discharge Prevention and Contingency Plans as required by ADEC. Permittees may incorporate any part of such plans into the BMP Plan by reference.
 - (3) Reflect requirements for storm water control under Section 402(p) of the Act and the regulations at 40 CFR 122.26 and 122.44, and otherwise eliminate to the extent practicable, contamination of storm water runoff.
 - (4) Reflect the development and implementation of the Mud Plan (see Part II.A.1.d.) for the formulation and control of drilling mud systems.
- 5. Documentation. The permittee shall maintain a copy of the BMP Plan at the facility and shall make the plan available to EPA and ADEC upon request. All offices of the permittee which are required to maintain a copy of the NPDES permit shall also maintain a copy of the BMP Plan.
- 6. BMP Plan Modification. The permittee shall amend the BMP Plan whenever there is a change in the facility or in the operation of the facility which materially increases the generation of pollutants or their release or potential release to the receiving waters. The permittee shall also amend the Plan, as appropriate, when plant operations covered by the BMP Plan change. Any such changes to the BMP Plan shall be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan shall be reviewed by the plant engineering staff and plant manager and shall be reported to EPA and ADEC in writing.
- 7. Modification for Ineffectiveness. At any time, if the

BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan shall be subject to modification to incorporate revised BMP requirements.

III. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling (Routine and Non-Routine Discharges).** The Permittee shall collect all effluent samples from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the Permittee shall collect additional samples at the appropriate outfall(s), and analyze them for the parameters limited in Part I.A.-E. of this permit (as applicable for the wastestream), whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample.

The Permittee shall collect such additional samples as soon as possible after the spill or discharge. The samples shall be analyzed in accordance with paragraph C., below. In the event of an anticipated bypass, as defined in Part IV.G. of this permit, the Permittee shall collect and analyze additional samples as soon as the bypassed effluent reaches the outfall. The Permittee shall report all additional monitoring in accordance with paragraph D., below.

- B. Reporting of Monitoring Results.** The Permittee shall summarize monitoring results each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The Permittee shall submit reports monthly, postmarked by the 10th day of the following month. The Permittee shall sign

and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit ("Signatory Requirements"). The Permittee shall submit the legible originals of these documents to the Director, Water Division, with copies to ADEC at the following addresses:

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, WD-135
Seattle, Washington 98101

Alaska Department of Environmental Conservation
Pipeline Corridor Regional Office
Attn: Water Quality & Wastewater Programs
411 W. 4th Ave., Suite 2C
Anchorage Alaska 99501

- C. Monitoring Procedures.** Monitoring must be conducted according to test procedures approved under 40 CFR § 136, unless other test procedures have been specified in this permit.
- D. Additional Monitoring by Permittee.** If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR § 136 or as specified in this permit, the Permittee shall include the results of this monitoring in the calculation and reporting of the data submitted in the DMR. The Permittee shall indicate on the DMR whenever it has performed additional monitoring, and shall explain why it performed such monitoring.

Upon request by the Director, the Permittee shall submit results of any other sampling, regardless of the test method used.

- E. Records Contents.** All effluent monitoring records shall bear the hand-written signature of the person who prepared them. In addition, all records of monitoring information shall include:

1. the date, exact place, and time of sampling or

measurements;

2. the names of the individual(s) who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the names of the individual(s) who performed the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

F. Retention of Records. The Permittee shall retain records of all monitoring information, including, but not limited to, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the Director or ADEC at any time.

A copy of the final permit shall be maintained at the drilling site.

G. Twenty-four Hour Notice of Noncompliance Reporting.

1. The Permittee shall report the following occurrences of noncompliance by telephone within 24 hours from the time the Permittee becomes aware of the circumstances:
 - a. any noncompliance that may endanger health or the environment;
 - b. any unanticipated bypass that results in or contributes to an exceedence of any effluent limitation in the permit (See Part IV.G., "Bypass

of Treatment Facilities");

- c. any upset that results in or contributes to an exceedence of any effluent limitation in the permit (See Part IV.H., "Upset Conditions") or
 - d. any violation of a maximum daily discharge limitation for any of the pollutants listed in the permit .
2. The Permittee shall also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subpart 1 above. The written submission shall contain:
- a. a description of the noncompliance and its cause;
 - b. the period of noncompliance, including exact dates and times;
 - c. the estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - e. the results of any monitoring data required under Paragraph III.A., above.
3. The Director may, at his or her sole discretion, waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Compliance Section in Seattle, Washington, by telephone, (206) 553-1213.
4. Reports shall be submitted to the addresses in Part III.B. ("Reporting of Monitoring Results").

H. Other Noncompliance Reporting. The Permittee shall report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B. are submitted. The reports shall contain the

information listed in Part III.G.2. of this permit.

I. Changes in Discharge of Toxic Substances. The Permittee shall notify the Director and ADEC as soon as it knows, or has reason to believe:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/l);
 - b. Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d. The level established by the Director in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter (500 ug/l);
 - b. One milligram per liter (1 mg/l) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR

122.21(g)(7); or

- d. The level established by the Director in accordance with 40 CFR 122.44(f).

IV. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. The Permittee shall give reasonable advance notice to the Director and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

B. Penalties for Violations of Permit Conditions.

1. Civil and Administrative Penalties. Sections 309(d) and 309(g) of the Act provide that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil or administrative penalty, not to exceed \$25,000 per day for each violation.

2. Criminal Penalties:

a. Negligent Violations. Section 309(c)(1) of the Act provides that any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or by both.

b. Knowing Violations. Section 309(c)(2) of the Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.

- c. **Knowing Endangerment.** Section 309(c)(3) of the Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. A person that is an organization shall be subject to a fine of not more than \$1,000,000.
- d. **False Statements.** Section 309(c)(4) of the Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both.

Except as provided in permit conditions in Part IV.G., ("Bypass of Treatment Facilities") and Part IV.H., ("Upset Conditions"), nothing in this permit shall be construed to relieve the Permittee of the civil or criminal penalties for noncompliance.

- C. **Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. **Duty to Mitigate.** The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

- E. Proper Operation and Maintenance.** The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances.** Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of water and wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters, except as specifically authorized in Part II.
- G. Bypass of Treatment Facilities.**
1. Bypass not exceeding limitations. The Permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.
 2. Notice.
 - a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required under Part III.G. ("Twenty-four Hour Notice of Noncompliance Reporting").

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Director or ADEC may take enforcement action against the Permittee for a bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment shall have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The Permittee submitted notices as required under paragraph 2 of this Part.
- b. The Director and ADEC may approve an anticipated bypass, after considering its adverse effects, if the Director and ADEC determine that it will meet the three conditions listed above in paragraph 3.a. of this Part.

H. Upset Conditions.

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the Permittee meets the requirements of paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the Permittee shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The Permittee submitted notice of the upset as required under Part III.G., Twenty-four Hour Notice of Noncompliance Reporting; and
 - d. The Permittee complied with any remedial measures required under Part IV.D., Duty to Mitigate.
 3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. Toxic Pollutants.** The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- J. Planned Changes.** The Permittee shall give notice to the Director and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility whenever:
1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants

discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under Part III.I.

The Permittee shall give notice to the Director and ADEC as soon as possible of any planned changes in process or chemical use whenever such change could significantly change the nature or increase the quantity of pollutants discharged.

- K. Anticipated Noncompliance.** The Permittee shall also give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

V. GENERAL PROVISIONS

- A. Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- B. Duty to Reapply.** If the Permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- C. Duty to Provide Information.** The Permittee shall furnish to the Director and ADEC, within the time specified in the request, any information that the Director or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director or ADEC, upon request, copies of records required to be kept by this permit.
- D. Other Information.** When the Permittee becomes aware that it

failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit the omitted facts or corrected information.

E. Signatory Requirements. All applications, reports or information submitted to the Director and ADEC shall be signed and certified.

1. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Director or ADEC shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director and ADEC, and
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company.
3. Changes to authorization. If an authorization under

Part V.E.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph V.E.2. must be submitted to the Regional Administrator and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this Part shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- F. **Availability of Reports.** Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with this permit shall be available for public inspection at the offices of the state water pollution control agency and the Director and ADEC. As required by the Act, permit applications, permits, Best Management Practices Plans, Mud Plans, and effluent data shall not be considered confidential.

- G. **Inspection and Entry.** The Permittee shall allow the Director, ADEC, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of the Act.

I. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

J. Severability. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

K. Transfers. This permit may be automatically transferred to a new Permittee if:

1. The current Permittee notifies the Director at least 30

days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
3. The Director does not notify the existing Permittee and the proposed new Permittee of his or her intent to modify, or revoke and reissue the permit.

If the notice described in paragraph 3 above is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

L. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

M. Reopener Clause.

1. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Act, as amended, if the effluent standard, limitation, or requirement so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit; or
 - b. Controls any pollutant or disposal method not addressed in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

2. This permit may be reopened to adjust any effluent limitations if future water quality studies, waste load allocation determinations, or changes in water quality standards show the need for different requirements.

VI. DEFINITIONS AND ACRONYMS.

1. AAS means atomic absorption spectrophotometry.
2. *Average of daily values for 30 consecutive days* means the average of the daily values obtained during any 30 consecutive day period.
3. *Ballast water* means harbor, river, and seawater added or removed to maintain the proper ship stability when not loaded with cargo.
4. *BMP* means Best Management Practices.
5. *bbl/hr* means barrels per hour. One barrel equals 42 gallons.
6. *Bilge water* means water which collects in the lower internal parts of the drilling vessel hull.
7. *Blowout preventer fluid* means fluid used to actuate hydraulic equipment on the blowout preventer.
8. *Boiler blowdown* means the discharge of water and minerals drained from boiler drums.
9. *Bulk discharge* means the discharge of more than 100 barrels in a one-hour period.
10. *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility (see Part IV.G.).
11. *Cd* means cadmium.
12. *Cooling water* means once-through non-contact cooling water.
13. *Deck drainage* means all waste resulting from deck washings, spillage, rainwater, and runoff from gutters, and drains including drip pans and work areas within

facilities subject to this permit.

14. *Desalination unit wastes* means wastewater associated with the process of creating freshwater from seawater.
15. *Diesel oil* means the grade of distillate fuel, as specified in the American Society for Testing and Materials Standard Specification D975-81, that is typically used as the continuous phase in conventional oil-based drilling fluids, which contains a number of toxic pollutants. For the purpose of this permit, *diesel oil* includes the fuel oil present at the facility.
16. *Domestic wastes* means materials discharged from showers, sinks, safety showers, eye-wash stations, hand-wash stations, fish-cleaning stations, galleys, and laundries.
17. *Drill cuttings* means the particles generated by drilling into subsurface geological formations and carried to the surface with the drilling fluid.
18. *Drilling fluid* means the circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. A water-based drilling fluid is the conventional drilling mud in which water is the continuous phase and the suspended medium for solids, whether or not oil is present. An oil-based drilling fluid has diesel oil, mineral oil, or some other oil as its continuous phase with water as the dispersed phase.
19. *Drilling Fluids Toxicity Test* means a toxicity test conducted and reported in accordance with the following approved toxicity test methodology: "Drilling Fluids Toxicity Test" as defined in Appendix 2 to Subpart A of 40 CFR 435.
20. *Excess cement slurry* means the excess cement including additives and wastes from equipment washdown after a

cementing operation.

21. *Exploratory facilities* means any fixed or mobile structure subject to subpart A of 40 CFR 435 that are engaged in drilling of wells to determine the nature of potential hydrocarbon reservoirs (such as ice islands, gravel islands, concrete island drilling units).
22. *Fire control system test water* means the water released during the training of personnel in fire protection and the testing and maintenance of fire protection equipment.
23. *Garbage* means all kinds of victual, domestic, and operational waste, excluding fresh fish and part thereof, generated during the normal operation and liable to be disposed of continuously or periodically except dishwater, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78.
24. *GC* means gas chromatography. *GC/MS* means gas chromatography/mass spectrometry.
25. A *grab* sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.
26. *Hg* means mercury.
27. *lb/bbl* means pounds per barrel.
28. "*Maximum*" means the highest measured discharge or pollutant in a wastestream during the time period of interest.
29. *Maximum hourly rate* as applied to drilling mud, cuttings, and washwater means the greatest number of barrels of drilling fluids discharged within one hour, expressed as barrels per hour.
30. *MLLW* means mean lower low water.

- 31. *MGD* means million gallons per day.
- 32. *mg/kg* means milligrams per kilogram.
- 33. *mg/l* means milligrams per liter.
- 34. *Mineral oils* means a class of low volatility petroleum product, generally of lower aromatic hydrocarbon content and lower toxicity than diesel oil.
- 35. *Mineral oil pills* (also called mineral oil spots) are formulated and circulated in the mud system as a slug in attempt to free stuck pipe. Pills generally consists of two parts; a spotting compound and mineral oil.
- 36. *Minimum* means the lowest measured discharge or pollutant in a wastestream during the time period of interest.
- 37. *Monitoring month* means the period consisting of the calendar weeks which end in a given calendar month.
- 38. *Monthly average* means the average of *daily discharges* over a monitoring month, calculated as the sum of all *daily discharges* measured during a monitoring month divided by the number of *daily discharges* measured during that month.
- 39. *MSD* means marine sanitation device.
- 40. *Muds, cuttings, cement at sea floor* means the materials discharged at the surface of the ocean floor in the early phases of drilling operations, before the well casing is set, and during well abandonment and plugging.
- 41. *M9IM* means those offshore facilities continuously manned by nine (9) or fewer persons or only intermittently manned by any number of persons.

- 42. *M10* means those offshore facilities continuously manned by ten (10) or more persons.
- 43. *No discharge of free oil* means that waste streams may not be discharged when they would cause a film or sheen upon or a discoloration of the surface of the receiving water or fail the static sheen test defined in Appendix 1 to 40 CFR 435, Subpart A.
- 44. *No discharge of diesel oil* in drilling mud means a determination that diesel oil is not present based on a comparison of the gas chromatogram from an extract of the drilling mud and from diesel oil obtained from the drilling rig or platform. GC/MS may also be used.
- 45. *Oil-based drilling mud* means a drilling mud with fossil-derived petroleum hydrocarbons as the continuous phase.
- 46. *Open water* means less than 25 percent ice coverage within a one (1) mile radius of the discharge site.
- 47. *Plastics* means any garbage that is solid material, that contains as an essential ingredient one or more synthetic organic high polymers, and that is formed or shaped either during the manufacture of the polymer or polymers or during fabrication into a finished product by heat or pressure or both. "Degradable" plastics, which are composed of combinations of degradable starches are either (a) synthetically produced or (b) naturally produced but harvested and adapted for use, are considered to be plastics. Naturally produced plastics such as crabshells and other types of shells, which appear normally in the marine environment, are not considered to be plastics.
- 48. *ppm* means parts per million.
- 49. *Putrescible waste* means waste capable of becoming rotting, rotten, or stinking.

- 50. *Sanitary wastes* means human body waste discharged from toilets and urinals.
- 51. *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 52. *Sidetracked well* means a new hole drilled from a main well to a different bottom hole location.
- 53. *Site* means the single, specific geographical location where a mobile drilling facility (jackup rig, semi-submersible, or arctic mobile rig) conducts its activity, including the area beneath the facility, or to a location on a single gravel island.
- 54. *Slush ice* occurs during the initial stage of ice formation when unconsolidated individual ice crystals (frazil) form a slush layer at the surface of the water column.
- 55. *SPP* means suspended particulate phase.
- 56. *Stable ice* means ice that is stable enough to support discharged muds and cuttings.
- 57. *Static Sheen Test* means the standard test procedure that has been developed for this industrial subcategory for the purpose of demonstrating compliance with the requirement of no discharge of free oil. The methodology for performing the static sheen test is presented in Appendix 1 to Subpart A of 40 CFR 435.
- 58. *Step-out well* means a new hole drilled from a main well to a different bottom hole location.
- 59. *Test fluid* means the discharge which would occur should

hydrocarbons be located during exploratory drilling and tested for formation pressure and content. This would consist of fluids sent downhole during testing along with water and particulate matter from the formation.

60. *Toxicity* as applied to BAT effluent limitations for drilling fluids and drill cuttings shall refer to the toxicity test procedure presented in Appendix 2 to Subpart A of 40 CFR 435.
61. *Unstable or broken ice conditions* means greater than 25 percent ice coverage within a one (1) mile radius of the discharge site after spring breakup or after the start of ice formation in the fall, but not stable ice.
62. *Upset* means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation (see Part IV.H.).
63. *v/v* means volume of oil/volume of mud (per API Retort Test).
64. *Victual waste* means any spoiled or unspoiled food waste.
65. *Waste stream* means any non-de minimis stream of pollutants within the Permittee's facility that enters any permitted outfall or navigable waters. This includes spills and other unintentional, non-routine or unanticipated discharges.
66. *Water depth* means the depth of the water between the surface and the seafloor as measured at mean lower low water (0.0).

67. *"24-hour composite"* sample means a flow-proportioned mixture of not less than 8 discrete aliquots. Each aliquot shall be a grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.
68. *"96-hr LC50"* means the concentration of a test material that is lethal to 50 percent of the test organisms in a toxicity test after 96 hours of constant exposure.

VI. REFERENCES

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(BMP). Office of Water. EPA 833-B-93-004. October 1993.
(Note - this can be obtained free of charge from the EPA
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